EPA Region 6
End-Of-Year (EOY) Review

Oklahoma Corporation Commission (OCC)
Underground Injection Control (UIC) Program

State Fiscal Year 2003 (FY03)
July 1, 2002 through June 30, 2003

I. Introduction

The Oklahoma Corporation Commission (OCC) is the lead agency for the State's UIC Class II and Class V wells at oil field service companies. The Oklahoma Department of Environmental Quality (ODEQ) has jurisdiction over all other injection wells in the state.

This annual review considers all the approved State UIC program administered by OCC, including the UIC grant work plan and other program activities between July 1, 2002 and June 30, 2003. On September 4, 2003, EPA Region 6 representatives met with OCC management and staff for EOY evaluation discussions (see Appendix A for attendees). OCC is commended for meeting or exceeding all of their program targets.

This report is subdivided into sections: Program Revisions, Grant Work Plan, and Oversight Issues. For the State End-of-Year Narrative, see Appendix B.

II. Program Revisions

A. Update of Draft Section 1425 Program Revision

Region 6 responded to OCC's 1998 draft Class II UIC program revision package on April 8, 2004, with a request for additional information on water quality protection standards, area of review effectiveness criteria, financial assurance, and corrective action authorities. **EPA requests that OCC respond with the additional information requested before June 1, 2004.**

B. Update of Draft Section 1422 Program Revision

In a joint program submission with ODEQ, OCC seeks UIC Primacy authority for certain Class V activities: reinjection of brine after halogen removal and aquifer remediation wells associated with leaking petroleum storage tanks. In 2002, at EPA's request, both Agencies submitted regulatory crosswalks that compare applicable State rules and regulations with the corresponding Federal regulations at 40 CFR 144 through 148. Region 6 sent comments to both agencies on May 28, 2002, and as of this report, EPA continues to await resubmission from Oklahoma's UIC Primacy agencies of an amended revision package for SDWA Section 1422 authority. Region 6 reminds OCC that SDWA authorization of all Class V UIC activities lies

with ODEQ, not OCC, until a complete revision is approved by EPA pursuant to 40 CFR part 145. **EPA requests that OCC resubmit any amendments to the joint SDWA Section 1422 program revision package by June 30, 2004.**

III. UIC Oversight Issues

OCC is commended for their responsiveness to EPA queries.

A. Mechanical Integrity Testing

OCC regulations require that Class II injection wells have mechanical integrity tests prior to operation, and subsequently, at least every five years (OAC 165:10-5-6). The UIC Director may require more frequent testing to assure protection of underground sources of drinking water (USDW), on an individual case basis.

Figure 1 shows the cumulative number of 5-year MITs performed on Class II wells in Oklahoma since 1993. The cumulative number includes all MITs, even the retesting following failure and retesting before transferring well ownership. Based on the current 5-year cumulative MIT value and a more accurate well inventory, compliance with the 5-year mechanical testing requirement appears to have been exceeded.

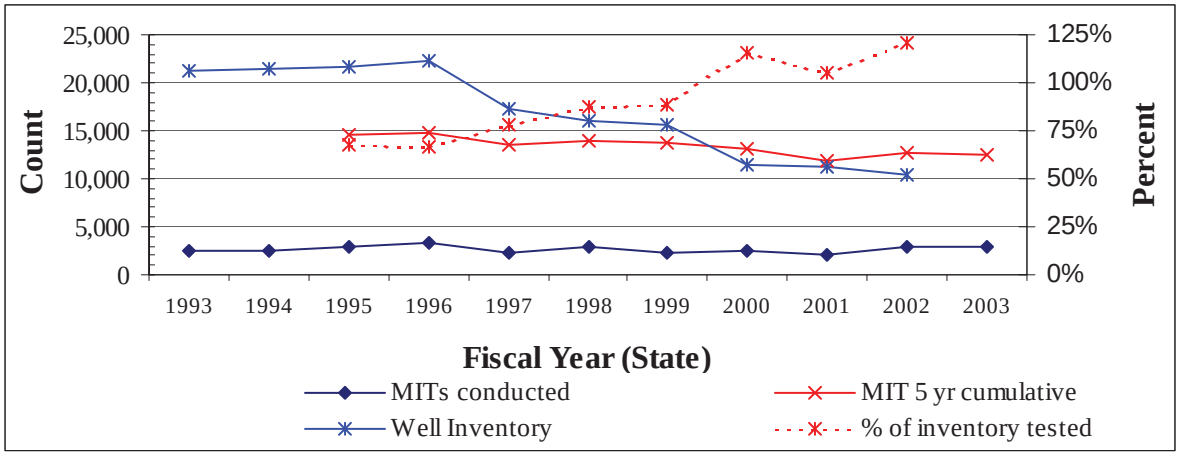

Figure 1. Mechanical Integrity & Well Inventory

Table 1 shows the MIT failure rate based on OCC's compliance reports (EPA Form 7520). Comparison between the 7520-3 Inspection Reporting and the 7520-2B Violation Reporting for MIT failures shows a significant 17-fold increase in violations per MIT failure in

Table 1. 7520 MIT Violations and Failures

	1997	1998	1999	2000	2001	2002	2003
Total MITs Conducted	3118	2667	2246	2424	2733	3068	2780
Total failed	141	140	159	153	242	128	135
% Failure	**4.5%**	**5.2%**	**7.1%**	**6.3%**	**8.9%**	**4.2%**	**4.9%**
Total Violations	93	103	215	179	192	2,195	3,558
Violations / Failures	0.7	0.7	1.4	1.2	0.8	17.1	26.4

2002, and a 26-fold increase in 2003. **EPA requests clarification on this anomaly.**

Table 2 shows the breakdown of reported unauthorized injections between Salt Water Disposal (SWD) and Enhanced Recovery (ER) categories.

Table 2. Unauthorized Injection

	1997	1998	1999	2000	2001	2002	2003
SWD: Violations: Unauthorized Injection	5	8	13	9	7	5	3
ER: Violations: Unauthorized Injection	13	24	36	22	17	0	6
Total	18	32	49	31	24	5	9

During a joint site visit on June 25, 2003, OCC and EPA personnel observed unauthorized injection into the Brown #1[1] salt water disposal well, though OCC could not provide a 1085 documenting the visit. A 1085 written Nov. 13, 2003, after the well had been plugged, was sent to EPA. The Brown #1 is located in Washington County. OCC issued the original[2] injection permit (Order 267411) for the Brown #1 on October 23, 1984. On May 24, 2001, OCC terminated[3] Order 267411 for operator non-compliance with OCC regulations for MIT and annual reporting. There is no documentation of any orders following the June site visit. The operator (now K&E) completed the injection line to a nearby newly-authorized injection well and plugged the Brown #1 as planned[4] on July 9, 2003.

OCC files show no operator transfer records of when K&E assumed operation of the Brown #1, nor when K&E commenced disposal operations. OCC levied no fine against the operator for unauthorized injection, and no documentation exists of cease and desist action by OCC. OCC did not report the Brown #1 unauthorized injection as a significant non-compliance (SNC) in the end-of year 7520 SNC Violations for FY03. **EPA considers all cases of injection without authorization as SNC violations, appropriately reported in the quarterly and annual 7520s.**

On November 14, 2003, EPA sent OCC an e-mail requesting information on:

1) Any actions taken with respect to the K&E Brown #1 unauthorized injection,

2) Why the violation is not included in the 7520 Significant Non-Compliance Violations list dated October 15, 2003, and

3) How associated OCC actions comply with OAC 165:10-5-2[5] and 165:10-5-6.

During a teleconference with EPA on January 7, 2004, OCC stated that their agency views the above referenced UIC regulations as subject to Director's discretion and that the

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[1] Misidentified at the time as the (471852) Brown 1A (not yet drilled).

[2] Injection Permit 267411, East Central Gas & Pipeline was the operator

[3] Order 452488, Penteco was then operator of the Brown #1.

[4] Per conversations between OCC and EPA held at the time of the site visit.

[5] 165:10-5-2. Approval of enhanced recovery injection wells or disposal wells…"The Commission shall fine an operator $5,000.00 for any violation of this subsection."…

Director agreed with field office actions. **Therefore, EPA recommends that OCC review and amend existing District surveillance and enforcement methods to ensure appropriate enforcement actions and to improve reporting of UIC regulatory violations.**

B. Area of Review (AOR)

On April 1 and 2, 2003, all State Class II UIC programs in Region 6 attended the "Area of Review (AOR) Summit" held in Dallas, Texas. The state AOR meeting was initially proposed by the OCC. The attendees compared methods used throughout the Region for determining corrective action in the permitting process. Region 6 States unanimously reported that their current methods of using a fixed radius to determine necessary corrective action are effective in protecting underground sources of drinking water (USDWs). Consensus referred to in the OCC EOY report refers to all state agencies in attendance, and not EPA. EPA Region 6 has referred the issue to the National UIC Technical Workgroup, which initiated a study on current Area of Review (AOR) requirements.

C. New Permit Review

EPA conducted a review of over fifteen percent of the 251 new OCC fiscal year 2003 permits (as of June 3, 2003). EPA selected 36 permits by picking the first permit of every seven in the list for review. More selected permits include two emergency permits associated with one selected well, and a new permit associated with a citizen's complaint. Three selected permits for gas storage were dropped from the review. Wells reviewed, but not used in the statistics include five older permits and withdrawal/revocation orders for the Fugo Well Services, Nichols 1-27 and the William Green, Gilcrease 1A application.

Information from all the well permits reviewed was entered into an Excel spreadsheet. Table 3 summarizes the number of wells reviewed by key components.

Table 3. OCC Permit Review

	Non-commercial	Emergency	Enhanced Oil Recovery	Commercial	Total
Well Permits	19	4	12	4	39
	49%	10%	31%	10%	
Technical Checklist	9	2	6	3	20
	47%	50%	50%	75%	51%
AOR Calculation	14	2	10	3	29
	74%	50%	83%	75%	74%
Clerk Review	9	0	8	1	18
	47%	0%	67%	25%	46%

1. Technical and AOR Reviews

Technical review includes verification of a complete application and in some cases an AOR calculation. The general methodology used by OCC to evaluate a new permit

application is included as Appendix C. The Technical Checklist refers to an OCC reviewer worksheet, such as an OCC form letter, which tells the operator of missing information in the application. The AOR Calculation refers to the Zone of Endangering Influence (ZEI) calculations done by OCC.

The official public files reviewed contained only about 51% with technical reviews, and 74% with ZEI calculations. The OCC program calls for all permits to be technically reviewed with ZEI calculations. It should be part of the reviewer's responsibility to make sure all the files are transferred to the main file room in a timely manner.

OCC permitted a new well (Deep Throat 1) for disposal of 60,000 barrels a day injection with 1000 psi allowed surface pressure. Drilling of this well started (spudded) on July 27, 2003 after permit approval on May 16, 2003. There is no record in the public file that this application was reviewed. No documentation beyond the application was in the permit folder, including whether the required opportunity for public or landowner comment took place. **EPA recommends that all appropriate documentation be moved from the reviewers' files in a consistent matter to the official public permit file.**

Six reviewed wells (Loco Unit, Le Norman Operator) have authorized surface injection pressure of 600 psi, split over a number of different injection depths less than 500 feet. However, the technical reviewer of these specific cases worked with the operator to make sure that the USDW was protected. The resolution was use of pressure regulators to split the flow across the perforated intervals and an annual Radioactive Tracer survey.

a) AOR Calculation

The OCC permit application, per OCC Regulation 165:10-5-5 (b)(2), includes a request for basic information necessary to calculate a zone of endangering influence, if required. For the wells in Table 4, operators provided the information less than half the time. OCC's stated practice is to request the information only when there is a problem well within the ¼ mile review area.

Table 4. AOR Review Information

	Wells
ZEI Calculation	**20**
greater than 1/4 mile pressure radius	14
Total wells	**39**
Pressure or Fluid Level reported	19
Porosity reported	23
Permeability Reported	17
AOR Map provided	**29**
operator map <> OCC map	13
2 injection wells in area	1
problem wells identified*	2
* One well has added permit restrictions, the other will be discussed later.	

b) Basic Data

Since applicants report pressure information less than half the time, the accuracy of the ZEI calculations is probably low. Frequently, when the operator is filling in the

blank for “shut-in static fluid level or a current formation pressure”, no units are provided, leaving the response unusable.

When no pressure or static fluid level information is provided, OCC estimates the current pressure from the midpoint of the perforations multiplied by 0.38 psi/ft. While this is a conservative estimate, it is no substitute for an actual measurement.

EPA requests OCC to be more proactive in ensuring all available reservoir information is supplied and clearly shown in the application forms, whether or not there are problem wells within the AOR.

c) Area of Review Maps

Potentially complicating the protection further, about half the maps used by OCC contain fewer wells than those supplied by the operator with the application. (Table 4-above). OCC maps in the permit files do not include wells that do not reach the injection interval; the applicant, according to 165:5-7-27, is required to show and label all wells with the total depth, that lie within a ¼ mile radius.

In cases where the plat map contains more wells than OCC files, it would be logical to have a method whereby OCC maps are updated as appropriate. For example, an initially identified problem well (application 200200340) identified within the AOR, was ‘dropped’ by OCC after the operator supplied an Oil-Law listing of the ‘problem’ well with measured location. Was this updated in the OCC database? The well (Phillips #1) is not in the on-line OCC database.

EPA requests that OCC develop a method of assessing the existence of additional wells in the area of review and updating their database as necessary, and encouraging the operator to file the required plat.

2. Protective Measures

The Oklahoma rule requesting samples from at least two water supply wells within the area is an excellent protective measure for both the operators and the USDW. OCC should be aware of an apparent loophole, however, by which an operator uses water analysis samples from some other location. This has occurred with at least one operator (Le Norman Energy Corporation, permit applications 200200213 & 200200360). The same well sample information was used in two different applications two townships apart. Decreasing the likelihood of this happening again could be as simple as requiring the legal description of the sample location (qrtr, qrtr, qrtr Section, Township, Range), which would also enable later confirmation of the continued water quality.

D. Field Inspection

As part of the annual review, EPA visited several newly permitted wells in the area surrounding Tulsa. Site visits with the district inspectors were conducted on June 25 and 26 and September 4. All except two of the wells were recompletions.

One of the wells visited is adjacent to Buck Creek Field. The operator stated the static fluid level was at or above surface. This condition represents a high potential for break-outs.

EPA requests an analysis of the 2002 Buck Creek break out, including current static fluid levels in the vicinity of active injectors.

E. Complaint Investigations/Inspections

The number of investigations and inspections has significantly increased in the last two years as shown in Table 5. OCC is commended for this effort. Based on discussion at the End-of-Year conference, it is EPA's understanding that these numbers may still be lower than actual, because of difficulty in tracking District investigation and enforcement actions.

Table 5. Complaint Investigation/Inspection

	1997	1998	1999	2000	2001	2002	2003
Investigations	352	322	325	165	150	678	1372
Inspections	106	108	107	140	150	534	1372

EPA would like an explanation of the reasons for the increased activity. For example is it related to better tracking, number of complaints received or numerous responses to a few repeated complaints? Does it seem to reflect District information?

Database issues have been a matter for discussion between EPA and OCC over a number of years. While the electronic reporting capabilities have improved during that time, there are still large gaps such as incorporating district enforcement activities and consolidating all well information into one database available to the public. **EPA would like to encourage planning and acquisition of a comprehensive database that will truly fill OCC's needs. The planning should include estimates of the training, hardware and/or other resources needed to populate and operate the database.**

F. Specific Complaint Issues

On several occasions EPA has received direct citizen complaints alleging that OCC was not sufficiently addressing citizen concerns. EPA has conducted two field visits with OCC staff to investigate these complaints, and has concluded that OCC has handled these cases appropriately.

Many complaints were filed both with OCC and the EPA by the Sober family against operator William Green. During an OCC hearing, allegations were made that the Gilcrease 1A well was used for illegal unauthorized injection by Green and an interim operator. The OCC court found there was insufficient evidence to support that allegation. There was an appeal of the case filed on behalf of the Sobers. This appeal is pending.

There was an application for injection filed in 2001 by William Green (200100157T) for the Gilcrease 1A. According to the working file provided by OCC, the application is substantially incomplete. In the public file is a protest letter from the Sobers seeking an application hearing and denial of the application. It is EPA's understanding that OCC has recently ordered William Green to plug the well. Follow-up communications with OCC indicate that the application was dismissed 11/25/03 (Order 483224).

G. Annual UIC Inventory Accuracy

During FY03, to further improve the existing database, OCC requested and received more federal funding to obtain and use a global positioning system to provide more accurate well location information.

The project used a great deal of the project funding to train OCC personnel on the ArcView GIS process. OCC reported they ran out of funds before the project could be completed. **Given the extensive drilling history in Oklahoma, the GPS mapping project should be a high priority. The Commission hard copy database should be incorporated in the on-line database.**

Beginning in 1997, OCC's Class II well inventory has decreased around 50% as the State UIC program renewed efforts to improve well inventory accuracy. EPA is still concerned about the seeming large number of former UIC wells that may remain unplugged because of inadequate operator financial assurance. This well count could range between 5,000 and 11,000 based on the decrease in the well database. OCC reported that a program to locate the unplugged wells has been completed in District II. **EPA requests the results of the initial project and encourages OCC to expand the effort to other Districts. EPA is particularly interested in required well closures during FY03.**

H. Annual Reporting by Well Operators

OCC continues to increase its enforcement efforts on operator compliance with the reporting requirements of OAC 165:20-5-7. Table 6 lists the number of required well reports filed by calendar year and the 7520 (EPA fiscal year) monitoring and reporting violations compared with the number of active injection permits. As reported in the Year-End Narrative, annual reporting compliance is improving. As also shown, OCC is taking enforcement action to improve the required reporting. (Semi-annual reporting for commercial wells is included in the compliance numbers.)

The final paragraph in OCC's Year-End Narrative says, "FY04 will be devoted to Operators' awareness of OCC Rules and requirements pertaining to UIC wells. It has been concluded that lack of understanding or knowledge of UIC requirements, are the primary cause of non-compliance."

It appears to EPA, that OCC is slowly increasing operator compliance through letters, compliance reviews and enforcement. **EPA recommends OCC use elevated enforcement actions to gain greater compliance.**

Table 6. Annual Reporting Compliance

	(Fiscal) Year	1999	2000	2001	2002
Active Inventory	State	15,610	11,448	11,330	10,500
F1012 Reports + M&R Violations		13,784	12,795	13,988	12,068
Annual Injection Well Reports (F1012)	Calendar	9,118	8,935	9,143	9,450
Compliance Reviews	State	4,394	4,398	7,128	5,906
		48%	49%	78%	62%
Monitoring & Reporting Violations (listed by year of violation; 7520)	EPA	4,666	3,860	4,845	2,618
% compliance (by October) (Annual F1012/Act Inv)		58%	78%	81%	90%
% violations (M&R Viol / Active Inv)		30%	34%	43%	25%

APPENDIX A

STATE/EPA Staff in Attendance
September 4, 2003
FY 2003 EOY Discussion

NAME	AGENCY	PHONE
Mr. Rod Davari	Oklahoma Corporation Commission	(405) 522-2751
Mr. Tim Baker	Oklahoma Corporation Commission	(405) 522-2763
Ms. Nancy Dorsey	Environmental Protection Agency	(214) 665-2294
Mr. Philip Dellinger	Environmental Protection Agency	(214) 665-8324
Mr. Mike Vaughan	Environmental Protection Agency	(214) 665-7313

APPENDIX B

Oklahoma Corporation Commission
Underground Injection Control
Class II Wells
Year-end Narrative
Work-plan 2003

Oklahoma Corporation Commission implemented a highly successful Program in FY 03, exceeding the established Targets for all of the segments of the Program as determined in Work-plan 2003. The attached "Annual Report Card", depicts a summary of all of the Activities, Targets, Accomplishments, and the Performance Rating for each of the categories.

The issues related to "Chemical Sealants", which had surfaced in FY 02, were addressed in cooperation with Region VI, and brought to conclusion resulting in UIC policies, which have been helpful to the industry and clear to regulate.

The proposal for a technical forum to address technical issues related to Area-Of-Review with participation from state agencies within Region VI, which are implementing Primacy Program for Class II wells, and EPA staff, came to fruition in spring of 2003. The discussions were informative in evaluating the AOR practices in place since Program's inception in the Region. The consensus among participants was that the Program's results to date pointed to a successful implementation and that such ideologues will lend themselves to a better implementation of the Program.

Fiscal Year 2002 did not fruit any new Rules in UIC Program. Program activities however, were up across the board as compared to previous year. On-site Inspections surpassed the Work-plan's Target by 58%, to 15,807, an increase of 2,562, or 26% over last year's. Complaint Related Inspection, although not a pre-set Target, were up by 835 count over last year's. The numbers of Mechanical Integrity Tests and MITs Witnessed were both lower than last year's, but surpassed their Targets by 23% and 26%, respectively. Compliance Reviews totaled 3,424, a performance rating of 49% over the Targeted value. Commercial Operations, Complaint Investigations, Permits issued, Technical Reviews, and Operatorship Transfers, all industry generated targets; were accomplished at a Performance Ratings of 100%. Permits issued in the period increased by 22% to 248 over the previous Fiscal Year; the number of Transfers during the same period subsided however, by 24%, a reflection of the current industry environment. Number of Public Hearings declined, so did the number of Technical Conferences, to approximately 100 and 307, respectively. Non-compliance with regards to Annual Injection Reports for Non-commercial Disposal wells, and Semi-annual Reports for Commercial Disposal wells, have improved substantially, to approximately 10% of an estimated active UIC well inventory of 10,500.

The focus of UIC's efforts in FY04 will be devoted to Operators' awareness of OCC Rules and requirements pertaining to UIC wells. It has been concluded that lack of understanding or knowledge of UIC requirements, are the primary cause of non-compliance. Both the means and frequency of contacts to communicate the information would have to be improved and expanded in order to reduce the effect of this factor on Compliance rating of operators of UIC wells.

APPENDIX B - continued

Annual Report Card
UIC Program Activities
Work-plan 2003
(7-1-02 Through 6-30-03)

August 15, 2003

Activity	Target	Accomplishment	Performance Rate%
Inspections(On-site)	10,000	15,807	158
Complaint Related Insp.	1,372	1,372	100
MITs (total)	2,300	2,819	123
MITs (Witnessed)	2,070	2,610	126
Compliance Reviews (total)	2,300	3,421	149
(Commercial Operations)	210	212	100
(Complaint Investigations)	1,372	1,372	100
Permits (Total Issued)	248	248	100
Technical Reviews	458	460	100
Operatorship Transfers	900	900	100
Public Hearings	98	98	100
(Staff attended public hearings)	98	98	100
Technical conferences	307	307	100

APPENDIX C

Oklahoma Corporation Commission
Underground Injection Control
Area Of Review Discussion

EPA discussed the Area of Review (AOR) process with OCC personnel during the Fiscal Year 2003 End-of-Year file review visit. OCC personnel involved in the discussion were Rod Davari and Suchard Jindasurat with Ken Johnson representing EPA Region 6.

EPA and OCC discussed how the AOR is performed for an OCC Class II injection well permit. OCC stated that a fixed 1/4-mile radius is used for non-commercial injection/disposal wells while a fixed 1/2-mile radius is used for commercial injection/disposal wells. Wells within these radii are reviewed for proper construction or, if abandoned, proper plugging.

Mr. Jindasurat and Mr. Davari defined a properly plugged well as a well having a cement plug across the perforations, a second plug protecting the base of treatable water, also referred to as the base of the lowermost USDW, with the plug extending 50 feet below and 50 feet above its base or to 3 feet below surface whichever is less, and surface casing cemented to surface and set at least 50 feet below the base of treatable water. Problem wells are defined as wells with improper surface casing construction and are mud plugged. Generally, Mr. Jindasurat stated that abandoned wells are either cement plugged or mud plugged usually with a cement cap on top of the mud. Mr. Jindasurat indicated that the zone of endangering influence (ZEI) calculation is used only as a tool to evaluate the potential risks to the Treatable Water, as a result of injection / disposal activities, under the operating parameters for which the Permit is being requested when a problem well is discovered within the fixed radius. The permit applicants have the options of properly plugging the problem well(s), or altering the operating parameters in Application to eliminate the calculated risks associated with the activity.

In preparing the ZEI analysis, OCC also requests static fluid level data to be provided by the operator for the injection interval in the proposed injection well. The operator provides the static fluid level value as well as the raw data, such as the echo-meter tape and tubing collar counts that it was calculated from.

Permeability data used in the ZEI calculation is typically obtained from one of three sources: a calculation using the radial flow equation as outlined in OCC's 1997 Operator's Guide To Filing UIC Applications and Reports; air permeabilities from core data; or well tests from either historical data or performed by the operator. Permeabilities commonly range from 20 to 300 md. OCC also noted that the base of treatable water, assumed as the USDW base in the ZEI calculation, ranges from 40 feet in northeastern Oklahoma to 600 to 1000 feet in western Oklahoma.

In permit Applications where surface injection/disposal pressure is 0 PSI or that the disposal operation is on gravity flow, Mr. Jindasurat and Mr. Davari stated that a mud plugged abandoned well is assumed to withstand formation pressure that it was exposed to, as the mud is assumed to have filled the well-bore to the surface and plug the perforations to prevent fluid entry, by means of exerting a higher hydrostatic pressure than the pressure being generated in the formation as a result of the injection activities at 0 PSI at a distance from the Problem well. In

permit Applications where surface injection is higher than 0 PSI, the ZEI calculations are based on the conservative engineering assumption that the problem wells' well-bores within the fixed radius are empty, regardless of the well's actual condition. The ZEI spreadsheet accounts for both the static fluid level from the midpoint of the injection interval and the pressure rise from injection and determines the head necessary to reach the base of treatable water previously determined by OCC for that spot location. Mr. Jindasurat also discussed that the ZEI calculation serves as corrective action by reducing the proposed permit rate and/or injection pressure to prevent the pressure influence from reaching the problem wells. In formations where the static fluid level is above the base of the treatable water, the ZEI was not considered valid as it would be of infinite extent and the area of review radius is confined to a fixed 1/4 mile for non-commercial wells.

For injection wells that operate on a vacuum, OCC does not perform an AOR. OCC explained that the pressure rise in the well-bore operating on vacuum would be negligible, thus having no adverse impact on the wells around it. OCC indicated that vacuum injectors typically occur in carbonate formations.

For injection wells where the operator requests an amended permit for a higher injection pressure, OCC requires a radioactive tracer survey and either a step rate test or an instantaneous shut in pressure from acid stimulation for comparison against historical fracture pressure for that formation. Regardless however, operating pressure limits for injectors are generally based upon 0.5 PSI/ft whether an original Application or an Amended Application. Applications to amend the existing Orders are subject to the same review process as are the original Applications for the same well.